

ABSTRACT

A control circuit controls a motor assembly having a coil and a movable arm. The control circuit includes a drive circuit that is coupled to the coil and that generates a drive signal in response to a control signal and a speed signal. The control circuit also includes a sensor circuit that is coupled to the drive circuit and to the coil and that generates the speed signal at a level that corresponds to the speed of the arm. In a disk drive, such a circuit can be used to control the movement of a read-write-head assembly during parking and unparking of a read-write head. The circuit monitors the speed of the head and uses this speed information as feedback to maintain the speed of the head within a specified range. This prevents damage to the head and other disk-drive components, particularly in a disk drive that incorporates a head parking platform.